

III. AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions, and listings, of claims of the application.

1. (Previously Amended) A vertical PNP transistor and vertical NPN transistor comprising:
an emitter region of the vertical PNP transistor including silicon and germanium; and
an extrinsic base region of the vertical NPN transistor and an intrinsic base region of the
vertical NPN transistor located in the same layer as the emitter region of the vertical PNP
transistor.
2. (Original) The transistor of claim 1, wherein the germanium makes up no less than 10%
of the silicon and germanium, and wherein the germanium makes up no more than 30% of the
silicon and germanium.
3. (Original) The transistor of claim 1, wherein the silicon is a polysilicon.
4. (Original) The transistor of claim 1, wherein the transistor has a cutoff frequency greater
than 10 GHz.
5. (Original) The transistor of claim 1, wherein the emitter region also includes carbon.

6. (Previously Amended) A vertical PNP and NPN transistor comprising:
a single layer of silicon that forms an emitter region of the PNP transistor, an extrinsic base region of the NPN transistor and an intrinsic base region of the NPN transistor.
7. (Previously Amended) The vertical PNP and NPN transistor of claim 6, wherein an emitter region of the PNP transistor includes silicon and germanium.
8. (Previously Amended) The vertical PNP and NPN transistor of claim 7, wherein the germanium makes up no less than 10% of the silicon and germanium, and wherein the germanium makes up no more than 30% of the silicon and germanium.
9. (Previously Amended) The vertical PNP and NPN transistor of claim 7, wherein the emitter region also includes carbon.
10. (Previously Amended) The vertical PNP and NPN transistor of claim 7, wherein the silicon layer is polysilicon in the emitter region of the PNP transistor, and mono-crystal silicon in a portion of the extrinsic base region and mono-crystal silicon in the intrinsic base region of the NPN transistor.
11. (Previously Amended) The vertical PNP and NPN transistor of claim 6, wherein the PNP transistor has a cutoff frequency greater than 10 GHz.

12-20. (Previously Cancelled)

10/065,837

Page 5 of 10